

L60 ----- ANSWER 4 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:487798 HCAPLUS

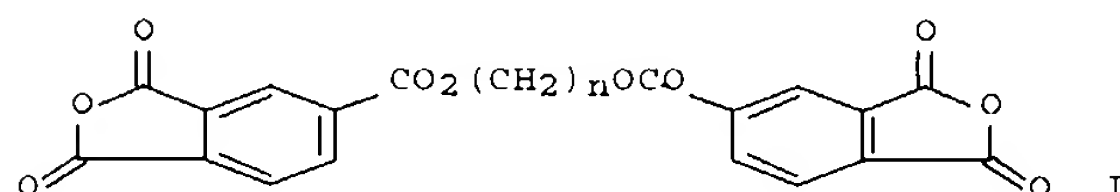
DN 122:241717

TI Electrically conductive adhesive films and their manufacture and bonding semiconductor elements using them

IN Yusa, Masami; Takeda, Shinji; Masuko, Takashi; Myadera, Yasuo; Yamazaki, Mitsuo

PA Johnson K. K., Japan

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06145639	A2	19940527	JP 1993-193452	19930804 <--
	JP 3288146	B2	20020604		
	US 5667899	A	19970916	US 1995-482516	19950607 <--
	US 5605763	A	19970225	US 1995-560182	19951120 <--
PRAI	JP 1992-245395	A	19920916	<--	
	JP 1992-247758	A	19920917	<--	
	JP 1993-193452	A	19930804		
	US 1993-122868	B2	19930916		

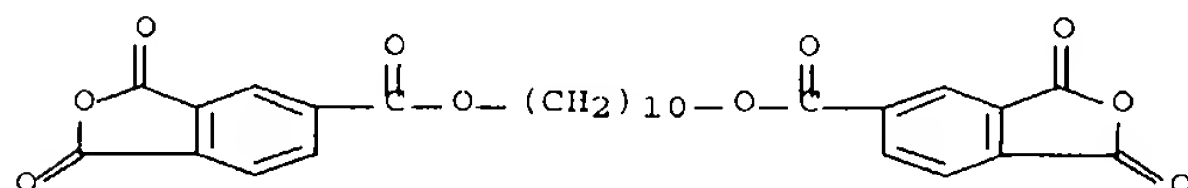


CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,10-decanediyl ester, polymer with 4,4'-methylenebis[2,6-dimethylbenzenamine] and 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 123046-43.5

CMF C28 H25 O10



AB The adhesive films comprise polyimides (A) having units of tetracarboxylic dianhydrides contg. .gtoreq.70 mol% I (n = 2-20) and diamines and 1-8000 parts elec. conductive fillers per 100 parts A and optionally contain 0.1-200 parts thermosetting resins per 100 parts A. A polyester film was coated with a compn. contg. 2,2-bis[4-(aminophenoxy)phenyl]propane-1,2-ethylenebis(trimellitate dianhydride) copolymer 100, Ag powder (TGG-1) 150, and AcNMe2 300 parts and heated 10 min at 80.degree. and 30 min at 150.degree. to give an adhesive film showing strength of bonding between a Si chip and a frame at 250.degree. >3 kg/chip.

IT 9003-35-4, H 1 103735-71-3, N 865 108563-19-5,  
 ESCN 195 109190-39-8, Epo Tohto YDCN 702 122158-08-1,  
 Plyophen VH 4170

RL: DEV (Device component use); POF (Polymer in formulation); USES (Uses)  
 (blends with polyimides; elec. conductive adhesive films for bonding semiconductor elements)

RN 9003-35-4 HCAPLUS

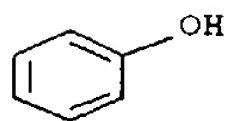
CN Phenol, polymer with formaldehyde (9CI) (CA INDEX NAME)

CM 1

CRN 108-95-2

09/785,486 10/3/03

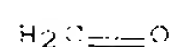
CMF C6 H6 O



CM 2

CRN 50-00-0

CMF C H2 O



RN 103735-71-3 HCAPLUS  
CN Epiclon N 865 (9CI) (CA INDEX NAME)

RN 108563-19-5 HCAPLUS  
CN Sumiepoxy ESCN 195 (9CI) (CA INDEX NAME)

RN 109190-39-8 HCAPLUS  
CN Epo Tohto YDCN 702 (9CI) (CA INDEX NAME)

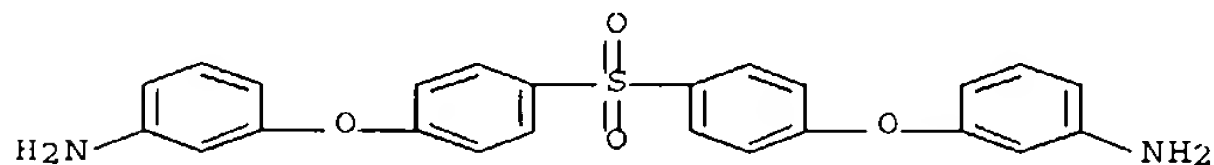
RN 122158-08-1 HCAPLUS  
CN Phenolite VH 4170 (9CI) (CA INDEX NAME)

IT 58883-54-8 146343-43-3 146393-87-5  
147469-38-3 161554-43-4  
RL: DEV (Device component use); POF (Polymer in formulation); USES (Uses)  
(elec. conductive adhesive films for bonding semiconductor elements)  
RN 58883-54-8 HCAPLUS  
CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl  
ester, polymer with 3,3'-[sulfonylbis(4,1-phenyleneoxy)]bis[benzenamine]  
(9CI) (CA INDEX NAME)

CM 1

CRN 30203-11-3

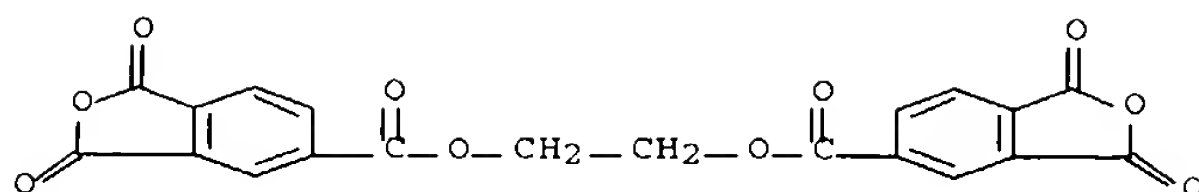
CMF C24 H20 N2 O4 S



CM 2

CRN 1732-96-3

CMF C20 H10 O10



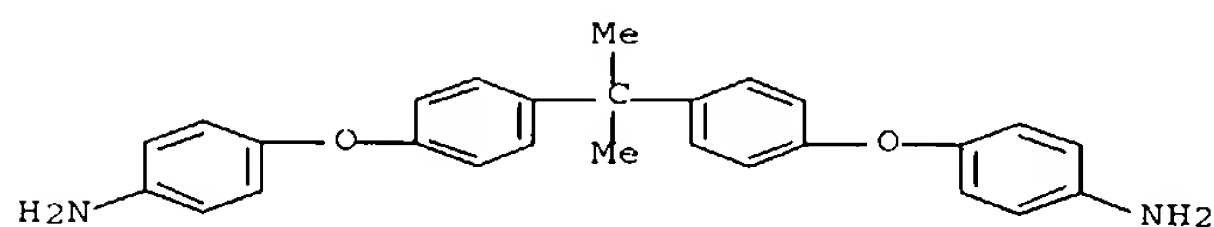
RN 146343-43-3 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl ester, polymer with 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 13080-86-9

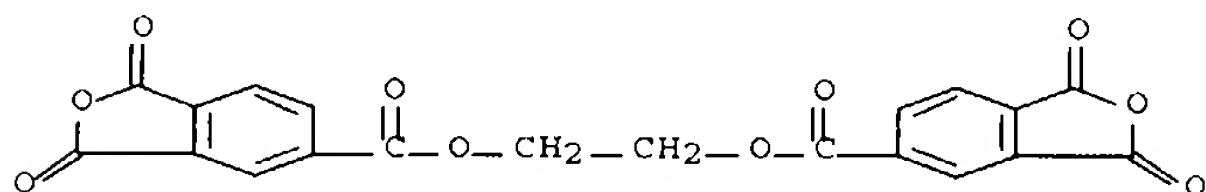
CMF C27 H26 N2 O2



CM 2

CRN 1732-96-3

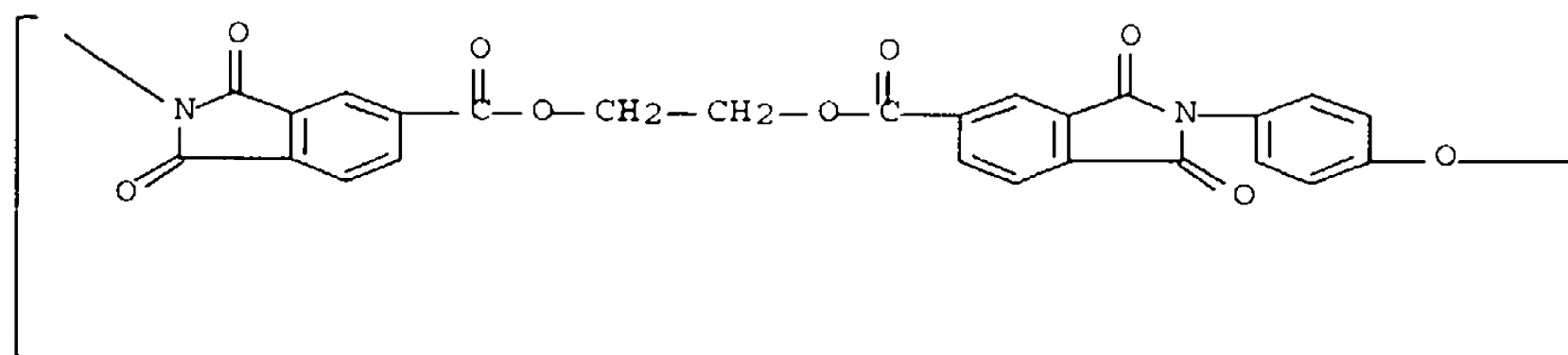
CMF C20 H10 O10



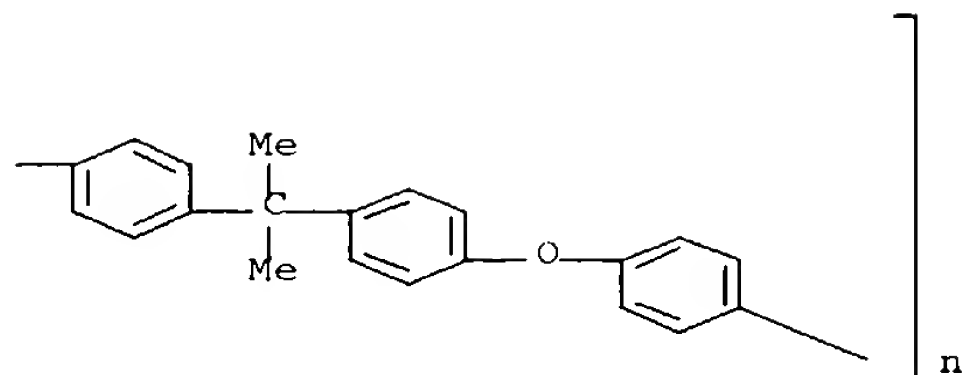
RN 146393-87-5 HCAPLUS

CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediylloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



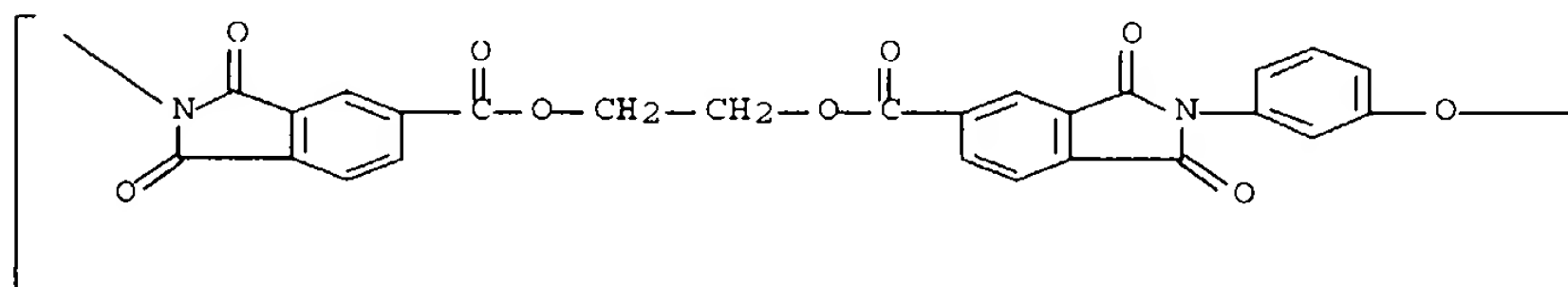
PAGE 1-B



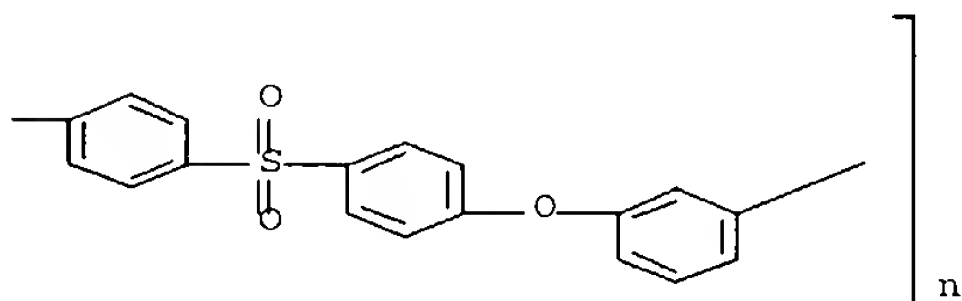
RN 147469-38-3 HCAPLUS

CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediylloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,3-phenyleneoxy-1,4-phenylenesulfonyl-1,4-phenyleneoxy-1,3-phenylene] (9CI)  
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



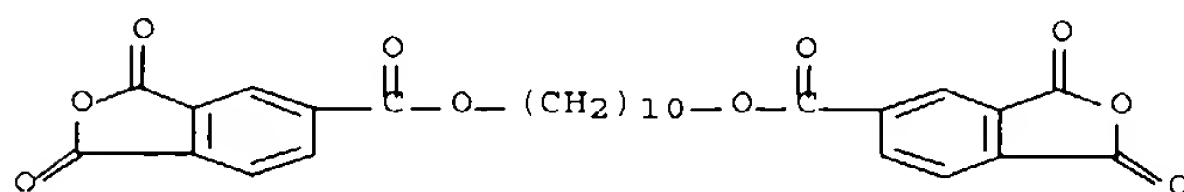
RN 161554-43-4 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,10-decanediyl ester, polymer with 4,4'-methylenebis[2,6-dimethylbenzenamine] and 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] (9CI)  
(CA INDEX NAME)

CM 1

CRN 123046-43-5

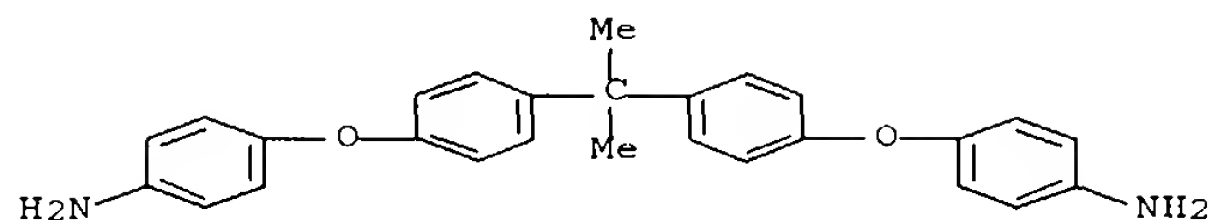
CMF C28 H26 O10



CM 2

CRN 13080-86-9

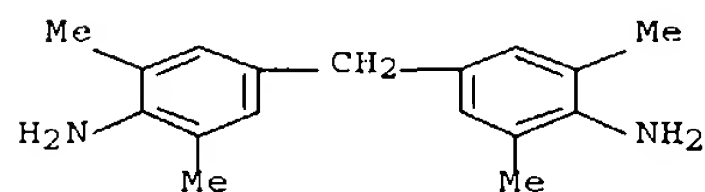
CMF C27 H26 N2 O2



CM 3

CRN 4073-98-7

CMF C17 H22 N2



IT 7440-22-4, Silver, uses  
 RL: DEV (Device component use); MOA (Modifier or additive use); USES  
 (Uses)  
 (elec. conductive filler; adhesive films for bonding semiconductor  
 elements)  
 RN 7440-22-4 HCAPLUS  
 CN Silver (8CI, 9CI) (CA INDEX NAME)

Ag

CAS/STN FILE 'REGISTRY' ENTERED AT 07:34:00 ON 02 OCT 2003

L1	1492	S	DECAMETHYLENE
L2	500	S	TRIMELLITATE
L3	11	S	L1 AND L2
L4	11	S	10 AND 1 AND L3
L5	10	S	L4 AND BIS
L6	10	S	L5 AND ANHYDR#####
L7	61	S	1 10(2W)DECAMETHYLENE
L8	164	S	BIS TRIMELLITATE
L9	5	S	L7 AND L8
L10	1	S	123046-43-5
L11	1	S	"TRIMELLITATE ION(3-)" /CN
L12	2	S	("DECAMETHYLENE BIS(TRIMELLITATE) DIANHYDRIDE-4,4'- DIAMINODIPHENYL ETHER COPOLYMER"/CN OR "DECAMETHYLENE BIS(TRIMELLITATE) DIANHYDRIDE-4,4'-DIAMINODIPHENYLMETHANE COPOLYMER"/CN)
L13	95	S	123046-43-5/CRN
L14	77704	S	(POLYAMIDE/PCT OR "POLYAMIDE FORMED"/PCT)

L15 7 S L13 AND L14  
 L16 7 S L15 NOT (L10 OR L11)  
 L17 7 S L15 NOT (L10 OR L9)  
 L18 56 S L7 NOT L6  
 L19 7 S L17 NOT L6  
 L20 7 S L17 AND BIS  
 L21 1 S L4 NOT L6  
 L22 20 S L3 OR (L9 OR L10 OR L11 OR L12) OR L15

FILE 'HCAPLUS' ENTERED AT 07:48:59 ON 02 OCT 2003

L23 48 S L22  
 L24 27 S L23 AND ADHE#####  
 L25 12121 S DIEBOND##### OR DIE BOND### OR (WAFER OR  
 SEMICONDUCT##### OR DICE OR CHIP) (3A) (BOND### OR ADHE####)  
 L26 22 S L23 AND L25  
 L27 27 S L24 OR L26  
 L28 0 S L27 NOT HITACHI?/CS,PA  
 L29 13 S L23 NOT HITACHI?/CS,PA  
 L30 27 S L6 OR L12  
 L31 SEL PLU=ON L27 1- PN : 32 TERMS

FILE 'DPCI' ENTERED AT 07:55:02 ON 02 OCT 2003

L32 4 S L31  
 L33 22 S L31/PN.G  
 L34 8 S L31/PN.D  
 L35 SEL PLU=ON L32 1- PN : 12 TERMS  
 L36 SEL PLU=ON L32 1- PN.G : 22 TERMS  
 L37 SEL PLU=ON L32 1- PN.D : 33 TERMS  
 L38 30 S L33 OR L34  
 L39 4 S L35  
 L40 551 S L36  
 L41 185 S L37  
 L42 722 S L39 OR L40 OR L41 OR L38  
 L43 25 S L35/PN.G  
 L44 724 S (L42 OR L43)  
 L45 SEL PLU=ON L44 1- PRN : 1173 TERMS

FILE 'HCAPLUS, WPIX, JAPIO' ENTERED AT 08:02:14 ON 02 OCT 2003

L46 2271 S L45  
 L47 0 S L46 AND ?BENZENETRICARBOXYLIC?  
 L48 0 S L46 AND ?BENZOTRICARBOXYLIC?  
 L49 0 S L46 AND ?BENZOTRICARBOXYLIC?  
 L50 32 S ?TRIMELLITAT? AND L46  
 L51 2 S ?DECAMETHYLEN? AND L46  
 D TI 1-2  
 L52 34 S (L50 OR L51)  
 L53 10 S L52 AND HITACHI?/CS,PA  
 L54 SEL PLU=ON L53 1- IC RN : 74 TERMS  
 L55 1380267 S L54  
 L56 10 S L53 AND L55  
 L57 24 S L52 NOT L56  
 L58 SEL PLU=ON L57 1- IC RN : 150 TERMS  
 L59 1854903 S L58  
 L60 23 S L57 AND L59

09/785,486 10/3/03

DN 127:263853  
 TI Electrically conductive polyimide-based bonding films  
 IN Yusa, Masami; Takeda, Shinji; Masuko, Takashi; Miyadera, Yasuo; Yamazaki, Mitsuo  
 PA Hitachi Chemical Co. Ltd., Japan  
 SO U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 122,868, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5667899	A	19970916	US 1995-482516	19950607
	JP 06145639	A2	19940527	JP 1993-193452	19930804
	JP 3288146	B2	20020604		
PRAI	JP 1992-245395	A	19920916		
	JP 1992-247758	A	19920917		
	JP 1993-193452	A	19930804		
	US 1993-122868	B2	19930916		

AB An elec. conductive bonding film useful in bonding an IC or LSI with a lead frame. The film comprises (A) a polyimide resin obtained by reacting a C2-20 alkylenebis(trimellitate anhydride) to .gtoreq.70 mol% with a diamine; and (B) an elec. conductive filler. Optionally, the film may further comprises a thermosetting resin or an imide compd. having at least two thermally crosslinking imido groups per mol.

IT 172028-43-2P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(elec. conductive polyimide-based bonding films for elec. app.)

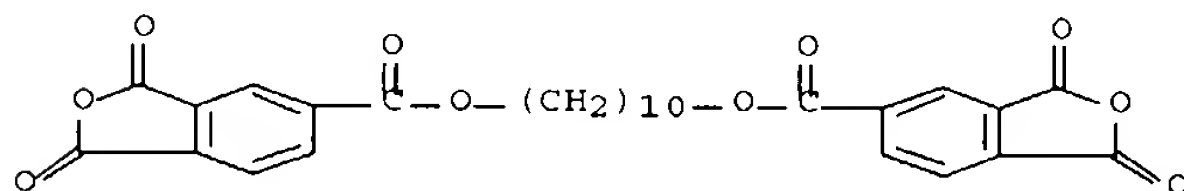
RN 172028-43-2 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,10-decanediyl ester, polymer with 5,5'-carbonylbis[1,3-isobenzofurandione], 4,4'-methylenebis[2,6-dimethylbenzenamine] and 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 123046-43-5

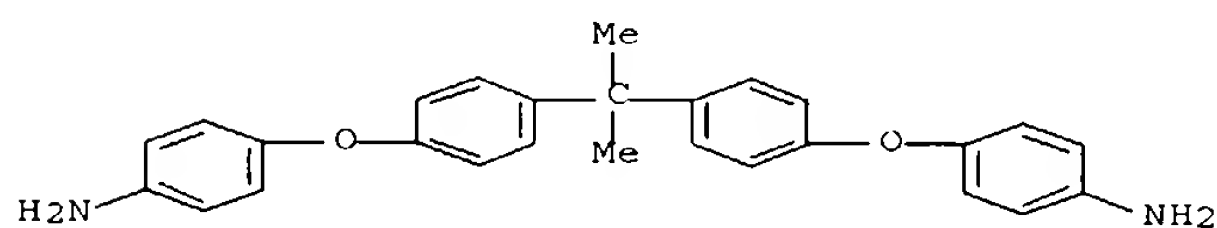
CMF C28 H26 O10



CM 2

CRN 13080-86-9

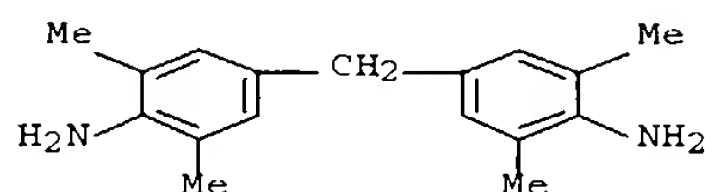
CMF C27 H26 N2 O2



CM 3

CRN 4073-98-7

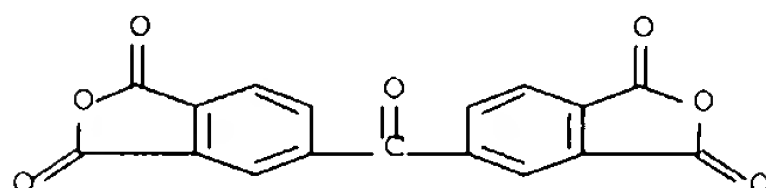
CMF C17 H22 N2



CM 4

CRN 2421-28-5

CMF C17 H6 O7



L30 ----- ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2003 ACS on  
STN

AN 1997:388596 HCAPLUS

DN 127:26063

TI Photoresist composition and manufacture of semiconductor device using the same

IN Hasegawa, Yuji; Kato, Toshihiko; Yusa, Masaki; Miyadera, Yasuo

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09090629	A2	19970404	JP 1995-242904	19950921
PRAI	JP 1995-242904		19950921		

AB The title photoresist compn. comprises 100 parts of a polyamic acid contg. 15-100 mol. % structural repeating unit I (n = 2-16; X = divalent arom. group contg. ethylenic unsatd. group), 1-200 parts of an amine compd. R1R2C:CR3COOR5NR42 (R1-4 = H, C1-6 alkyl, Ph, vinyl, aryl; R5 = C2-6 alkylene) and 0.01-30 parts of a photoinitiator. The compn. is suitable for producing a polyimide coating.

IT 190058-99-2, 3,5-Diaminobenzoic acid ethyl methacrylate ester-1,10-(decamethylene)bis(trimellitate dianhydride) copolymer  
RL: TEM (Technical or engineered material use); USES (Uses)  
(photoresist compn. for manufg. semiconductor device)

RN 190058-99-2 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,10-decanediyl ester, polymer with 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 3,5-diaminobenzoate (9CI) (CA INDEX NAME)

CM 1